

Notice of Allowability

Application No.

10/606,768

Examiner

Chuc D. Tran

Applicant(s)

HA ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/8/04.
2. ☒ The allowed claim(s) is/are 1,3-14 and 16-18.
3. ☒ The drawings filed on 27 June 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



HOANG V. NGUYEN
PRIMARY EXAMINER

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Donald L. Monin Jr, Reg: 47,256 on February 3, 2005.

The application has been amended as follows:

Claims 16 and 17, line 1, "claim 15" change to - - 14 - -;

Claim 16, line 3, "voltage source is 15V" change to - - voltage source is -15V - -;

Claim 18, line 3, " the age" change to - - the aging - -.

Response to Arguments

2. Applicant's arguments, see Remarks, filed 12/8/04, with respect to claims 1 and 14 have been fully considered and are persuasive. The Rejection and Objection of claims 1 and 14 has been withdrawn.

In virtue of this Amendment, claims 2 and 15 have been cancelled and a new claim 18 has been added.

Allowable Subject Matter

3. Claims 1, 3-14 and 16-18 are allowed.
4. The following is an examiner's statement of reasons for allowance:

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Regarding claim 1, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in the claim: a capacitor connected between the first switch device and the second switch device, wherein a cathode terminal of the electro luminescence cell is connected to a cell support voltage source of a positive voltage, and specifically comprising the limitation of an aging circuit having at least one aging AC voltage source for applying a specific aging AC voltage pulse to the pixels.

Regarding claims 3-7 are allowable for the reason given in the claim because of their dependency status from the claim 1.

Regarding claim 8, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in the claim: a first switch device formed between a cell drive voltage source and the electro luminescence cell for driving the electro luminescence cell; a second switch device connected to the cell drive voltage source to form a current mirror with the first switch device; a third switch device connected to the second switch device, the column line and the row line for responding to a signal in the row line; a fourth switch device connected between the third switch device and gate terminals of the first and second switch devices; a capacitor connected between the cell drive voltage source and the gate terminals of the first and second switch devices, wherein a cathode terminal of the electro luminescence cell is connected to a cell support voltage source of a positive voltage; and specifically comprising the limitation of an aging circuit having at least one aging AC voltage source for applying a specific aging AC voltage pulse to the pixels.

Regarding claims 9-13 are allowable for the reason given in the claim because of their dependency status from the claim 8.

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Regarding claim 14, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in the claim: applying a plurality of aging AC voltages to the pixels, the aging AC voltage is applied in an AC voltage pulse; and causing an electro luminescence cell within the pixel to emit light by the aging AC voltage in accordance with a current corresponding to a current path formed wherein the electro luminescence cell emits light in accordance with a voltage difference between a cell support voltage source and a cell drive voltage source corresponding to the current path.

Regarding claims 16 & 17 are allowable for the reason given in the claim because of their dependency status from the claim 14.

Regarding claim 18, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in the claim: at least one aging AC voltage source for applying a specific aging AC voltage pulse to the pixels; and specifically comprising the limitation of a second aging AC voltage sources that are switched between 0V and a specific negative voltage, the specific negative voltage is different for each aging AC voltage source; and a third aging AC voltage source for turning on the first and second aging switch devices.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of relevant Prior Art

Prior art Jo (USP. 6,806,497) disclose method for driving electronic device.

Prior art Yumoto (USP. 6,686,699) disclose active matrix type display apparatus.

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Prior art Bae et al (USP. 6,693,383) disclose electro-luminescence panel.

Prior art Lee et al (USP. 6,683,417) disclose organic electro luminescent display device.

Prior art Sanford et al (USP. 6,734,636) disclose OLED current drive pixel circuit.

Prior art Libsch et al (US 2003/0107565) disclose active matrix OLED voltage drive pixel circuit.

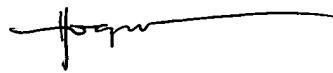
Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
February 3, 2005


HOANG V. NGUYEN
PRIMARY EXAMINER